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REMARKS

With entry of the foregoing amendments, claims 1 and 3-28 are pending in the application. Specifically, claims 1 and 28 have been amended. No new matter has been introduced by these amendments. Reconsideration is respectfully requested.

Formalities

The Applicant notes that a Request for Change of Docket Number and Corrected Filing Receipt was filed on February 20, 2004, changing the Attorney Docket Number for this patent application from 7184-PA10 to 3194.1005-000.

Claim Rejections - 35 U.S.C. § 103

The Examiner rejected claims 1 and 3-28 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,873,263 to Chang in view of U.S. Patent 5,315,521 to Hanson et al in further view of U.S. Patent 6,182,275 to Beelitz et al.

Regarding claims 1, 14 and 28, the Examiner states that Chang discloses a fluid purification system that comprises various types of equipment and that optimization of the fluid purification systems through process equipment selection and operation is well known in the art, as suggested by Hanson. Although the Examiner acknowledges that Chang does not teach a method for identifying fluid purification equipment that is optimized for use in a particular fluid purification system, the Examiner is of the opinion that Beelitz does teach this feature.

Specifically, the Examiner alleges that Beelitz teaches a method that incorporates the use of a relational database and an interactive user interface in configuring, building and selling a customizable computer system. The Examiner concludes that one of ordinary skill in the art would have recognized the suitability of applying the same or similar method as disclosed in Beelitz for the same intended purpose of configuring, building and selling a similarly customizable product, such as a fluid purification system as taught by Chang. We disagree.

As now recited in amended base claims 1 and 28, the present invention identifies fluid purification equipment that is optimized for use in a particular fluid purification system. Specifically, the invention provides an interactive interface for eliciting information that defines a particular fluid purification system, including operating parameters of the system. This defining information about the system is used to automatically identify a fluid purification

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equipment in its entirety that is formed of individual components in a manner free of user
selection of the individual components. Support for these amendments can be found at least in
the specification as originally filed on page 3, lines 11-20; page 4, line 1 through page 5, line 3;
page 6, lines 6-27; and page 7, line 15 through page 8, line 27.

The present invention, as recited in base claims 1 and 28, enables an operator of a fluid
purification system to identify the significant operating parameters of the fluid purification
system in which the purification equipment is to be used and then automatically receive a fluid
purification equipment package in its entirety that is optimized at the component level to the
operator's specific requirements. (Subject Specification, page 3, lines 11-27). For example, such
operating parameters can include fluid type, flow rate, contaminant challenge, required output
fluid purity, interconnection fittings for system coupling, and other parameters. (See page 6,
lines 6-27). In other words, the invention gathers information about the operating parameters of
the system in which the fluid purification equipment is intended to operate and, in response,
automatically identifies (in a manner free of user component selection) the optimal fluid
purification equipment in its entirety. The identified optimal fluid purification equipment is
formed of a set of individual components specified in the database. Beelitz does not teach or
suggest such features.

In contrast, Beelitz discloses a system in which the user selects the individual components
for a customized computer system. Specifically, the user is presented with an initial list of
selectable component options for implementation on a target computer system. Each subsequent
list contains component options that are "compatible" with a prior component selection. For
example, referring to Figs. 2-6 of Beelitz, a user builds a customized computer system by
selecting individual components from compatible lists of processor types, RAM, operating
systems, software programs, etc.

Thus, Beelitz does not teach or suggest a system or method that automatically identifies
an optimal fluid purification equipment in a manner free of user selection of individual
components. Specifically, Beelitz does not use information about a fluid purification system in
order to automatically identify the fluid purification equipment that is formed of a resultant set of
individual components and that can be optimally used in that system. Rather, in Beelitz, no
information is provided about the operating parameters of the target computer system for use in
an automated selection process at all. The user makes individual component selections to build
the target computer system.

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Moreover, as recited in base claims 1 and 28, the present invention automatically identifies a resultant set of components that are capable of being "operated to substantially satisfy the operating parameters of said particular fluid purification system for optimized fluid purification." Applicant maintains that the mere fact that Beelitz only presents compatible component choices during the component selection process does not mean that the resulting system is capable of satisfying the operating parameters of the desired computer system for optimized operation. At best, the presentation of compatible component choices in Beelitz merely guarantees the interoperability of selected system components.

With respect to fluid purification equipment, there may be many combinations of components that may be compatible with each other in terms of assembly and interoperability. However, there may only be a few combinations that are able to satisfy the desired operating parameters for optimized fluid purification. For example, one combination of compatible components may provide a desired range of fluid flow rates at the cost of poor corrosion resistance, while another combination may satisfy both of these operating parameters. In other words, compatibility does not necessarily equate to optimized operation.

In Beelitz, a user would need to have specific knowledge that the particular selection of a component is capable of yielding the desired operating parameters for optimized operation. Since the present invention automatically identifies the fluid purification equipment itself, as opposed to the user building the system through individual component selection, the resultant set of identified components are capable of being operated to substantially satisfy the operating parameters of said particular fluid purification system for optimized fluid purification, as recited in base claims 1 and 28.

For example, in Beelitz, a user may be able to build a computer system comprising components that are compatible for one another for purposes of interoperability. However, the operable computer system may not satisfy the requirements of the intended application. In other words, assume that the intended application relates to computer animation. The user in Beelitz may be given choices relating to the amount of RAM and the type of processors, but the Beelitz system does not indicate to the user which choices are optimal for computer animation. Instead it is up to the user to make the individual component selections as a candidate computer system is built. The user must not only know how much RAM will be necessary and how fast the processor will need to be in order to handle the intensive computation required for computer

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animation, but also must know at what levels the proposed computer system becomes optimized for this application.

In contrast, the present invention performs automatic identification of the fluid purification equipment in total (in its entirety) in a manner free of user selection of components. Specifically, the user provides information about the fluid purification system in which the equipment is intended to operate (without making individual equipment component selections) and then receives the identification of the optimal equipment that is formed of a resultant set of individual components which can be operated to optimally satisfy those operating parameters. No user selection of components is performed during this automatic identification.

For at least these reasons, Beelitz does not teach or suggest the claimed "using said defining information, automatically identifying a fluid purification equipment in its entirety formed of a resultant set of one or more of the plurality of fluid purification equipment components." Specifically, Beelitz does not teach or suggest "the automatic identification of the fluid purification equipment being performed in a manner free of user selection of individual components." Furthermore, Beelitz does not teach or suggest "the resultant set of one or more identified components capable of being . . . operated to substantially satisfy the operating parameters of said particular fluid purification system for optimized fluid purification." Each of these claim terms is recited in base claims 1 and 28 as now amended.

Thus, it is believed that base claims 1 and 28 are patentable in light of the prior art of record and should be allowed. By virtue of their dependency to base claim 1, the same arguments apply to dependent claims 3-27 such that the features of claim 1 in combination with the features of the dependent claims are neither disclosed nor suggested by the cited prior art of record.

Beelitz as Non-Analogous Art

Applicant also maintains that Beelitz involves non-analogous art relative to Chang and Hanson and contains no suggestion or motivation to combine the references. "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d, 1443, 1445 (Fed. Cir. 1992)" (Emphasis added) Contrary to the Examiner's assertions, we disagree

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that Beelitz is reasonably pertinent to the particular problem with which the inventor was concerned.

We disagree that Beelitz relates effectively to the same problem and solution as that addressed by the claimed invention. Specifically, the particular problem solved by the present invention is not just selecting compatible components of a hardware system, but optimizing the process conducted by a hardware system by specifying desired operating parameters which indirectly defines candidate equipment components. So the problem addressed by the present invention isn't so much in customization based on user preference/choice (as in Beelitz), but in optimization based on system operating parameters (a "body of defining information"). As to the solutions provided, Beelitz provides a method and apparatus that enables a user to customize a computer system, as opposed to fluid purification equipment. Moreover, Beelize accomplishes customization of the computer system solely through user selection of compatible components, while the present invention automatically identifies a fluid purification equipment formed of a resultant set of fluid purification equipment components based on user-provided information regarding the operating parameters of a particular fluid purification system. In particular, the automatic identification of the fluid purification equipment is performed in a manner free of user selection of individual equipment components. Furthermore, the resultant set of components are not only compatible, but they are capable of being operated to substantially satisfy the operating parameters of the particular system for optimized fluid purification.

We also disagree that one of ordinary skill in the art would have had a reasonable expectation of success in applying the teachings of Beelitz in order to configure and sell customizable fluid purification equipment that is capable of being operated to substantially satisfy the operating parameters of the particular system for optimized fluid purification. At best, the presentation of compatible component choices in Beelitz facilitates the interoperability of selected system components. Any other interpretation would involve impermissible hindsight.

We also disagree that the present invention is similar to the teachings of Chang in view of Beelitz, which the Examiner characterizes as merely substituting or replacing a manual methodology of consulting print references, such as operating manuals or equipment catalogs, in process design and optimization. The present invention does not merely replace such manual methods. Rather, the present invention provides a method and apparatus that automatically identifies a fluid purification equipment formed of a resultant set of fluid purification equipment components in a manner free of user selection of individual equipment components, with the

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resultant set of components satisfying the operating parameters of a particular fluid purification system for optimized purification. Chang in view of Beelitz does not determine the optimal set of components for optimized fluid purification from the various permutations of available components.

For at least these reasons, we believe that Beelitz involves non-analogous art relative to Chang and Hanson and contains no suggestion or motivation to combine the references. Therefore, we request the Examiner to withdraw his reliance on this reference as a basis for rejection of applicant's invention. Such a combination of references can only be arrived at by use of impermissible hindsight.

New claim 29 makes clear the foregoing point (i.e., reasons supporting the position that the cited references are non-analogous art). Further, claim 29 parallels base claims 1 and 28 and should be allowable for the same reasons given above as to claims 1 and 28.

CONCLUSION

In view of the above amendments and remarks, it is believed that pending claims (claims 1 and 3-29) are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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